

LUKANIN, V.S.

Survival of adult Dreissena in aqueous solutions of copper sulfate of various concentration and temperature. Trudy Inst. biol. vnutr. vod no.7:81-82 '64. (MIRA 18:2)

1. Institut biologii vnutrennikh vod AN SSSR.

~~LUKANIN, Y.S.~~

Feeding of chironomid larvae (Insecta, Diptera) in the surf. zone of the Black Sea, near Karadag. Nauch.dokl.vys.shkoly; biol.nauki no.1 (MIRA 11:8)  
27-34 '58

1. Predstavlena kafedroy gidobiologii Moskovskogo tekhnicheskogo instituta rybnoy promyshlennosti i khozyaystva im. A.I. Mikoyana.  
(BLACK SEA--CHIRONOMIDAE)  
(LARVAE--INSECTS)

LUKANIN, V.S.

Effect of the body weight and temperature on the rate of filtration  
in tentipeds feeding on seston. Vop. ekol. 5:117-118 '62.  
(MIRA 16:6)

1. Institut biologii vodokhranilishch AN SSSR, Borok.  
(Chironomidae)

MANTEYFEL', B.P., otv. red.; LUKANIN, V.S., red.

[Feeding habits of predatory fishes and their relationship with feed organisms] Pitanie khishchnykh ryb i ikh vzaimootnosheniia s kormovymi organizmami. Moskva, Nauka, 1965. 194 p. (MIRA 18:11)

1. Akademiya nauk SSSR. Institut morfologii zhivotnykh.

LUKANIN, Ye., polkovnik

The recommended method is the most effective weapon in the hands  
of the leaders of political study groups. Komm.Vooruzh.Sil 1  
no.16:82-86 Ag '61. (MIRA 14:7)  
(Russia--Armed forces--Political activity)

LEKANI, Ye., polkovnik; KOZLOV, U., podpolkovnik, kand. istoricheskikh nauk.

Victory of the Soviet Armed Forces in the Great Patriotic War; third article. Komm. Vooruzh. Sil 4 no.1:61-68 Ja '64.  
(MIRA 17:9)

ИДЯНИН, Ye., polkovnik

Substantiability and methodology of political studies. Kmm.  
Voprash. Sil 46 no.10:69-74 My :65. (MIRA 18:6)

DAVYDOV, A.S., polkovnik; KORSHUNOV, V.N., polkovnik; KOZLOV, N.D., podpolkovnik; LUKANIN, Ye.A., polkovnik; NESIN, A.A., polkovnik; POZMOGOV, A.S., polkovnik; PUTINTSEV, A.I., podpolkovnik; SIDORENKOV, P.I., polkovnik; SYTOV, L.G., polkovnik; FEDIN, G.R., polkovnik; CHEREDNICHENKO, V.T., polkovnik; CHERNYSHEV, F.I., kontr-admiral zapasa; SHATURNYI, A.N., polkovnik; ROMANOV, I.M., red.

[Methodological materials for political instruction] Metodicheskie materialy k politicheskim zaniatiyam. Moskva, Voenizdat, 1965. 240 p. (MIRA 18:7)

1. Russia (1923- U.S.S.R.) Glavnoye politicheskoye upravleniye Sovetskoy Armii i Voenno-Morskogo Flota. Upravleniye propagandy i agitatsii.

LUKANIN Ya.A., polkovnik; CHEREDNICHENKO, V.T., polkovnik; LESNEVSKIY, S.A., polkovnik; KOLOTOV, V.I., kapitan 1 ranga; KORKESHKIN, A.P., polkovnik; POROPONOV, I.F., podpolkovnik; ROZANOV, I.S., podpolkovnik; LISENKOV, M.M., podpolkovnik; SAPRONOV, A.T., mayor; BELASHCHENKO, T.K., mayor; SKAPENKOVA, T.N.; SOROKINA, L.D.; ZOTOV, M.M., polkovnik, red.; MYASHNIKOVA, T.F., tekhn.red.

[Material for political studies; a manual for group leaders]  
Materialy k politicheskim zaniatiyam v pomoshch' rukovoditeliam  
grupp. Moskva, Voen.izd-vo M-va obor. SSSR, 1958. 199 p. (MIRA 11:5)

1. Russia (1923- U.S.S.R.) Armiya. Upravleniye propagandy i  
agitatsii. 2. Voyenny otdel Gosudarstvennoy biblioteki imeni  
V.I.Lenina (for Skapenkova, Sorokina)  
(Russia--Army--Education, Nonmilitary)

KALASHNIK, M.Kh., general-leutenant, red.; LUKANIN, Ye.A.,  
gvardii polkovnik, red.; MURAV'YEV, A.I., polkovnik,  
red.

[Sergeants and master sergeants of the Armed Forces of  
the U.S.S.R.; a training manual for political instruc-  
tion with sergeants and master sergeants] Serzhanty i  
starshiny Vooruzhennykh Sil SSSR; uchebnoe posobie dlia  
politicheskikh zaniatii s serzhantami i starshinami. Mo-  
skva, Voenizdat, 1963. 412 p. (MIRA 18:2)

1. Russia (1923- U.S.S.R.) Glavnoye politicheskoye up-  
ravleniye Sovetskoy Armii i Voenno-Morskogo Flota.

S/020/63/148/003/019/037

B108/B180

AUTHORS: Bagaryatskiy, Yu. A., Lukanina, I. G.

TITLE: X-ray diffraction investigation of the initial stage of disintegration of the solid solution an Fe-Ni-Al alloy

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 3, 1963, 573-576

TEXT: The superstructure reflections from large single crystals, approximate composition  $Fe_2NiAl$ , were studied after homogenizing and quenching and after tempering at  $700^{\circ}C$ . On quenching spherical zones were formed, which increased in size on tempering. They consisted of a core enriched in atoms of one type and a shell of lesser concentration. In the alloy under examination these cores may be either chiefly Ni and Al atoms (incipient  $\beta_2$ -phase) or chiefly Fe atoms (incipient  $\beta$ -phase). The size of these zones is about  $90 - 140 \text{ \AA}$  after normal quenching,  $40 - 65 \text{ \AA}$  after sudden quenching, increasing to  $170 - 290 \text{ \AA}$  after 1 hr tempering. When the number of zones with NiAl cores grows, the whole alloy disintegrates into regions of not equi-axial shape. It is this which causes the high

Card 1/2

X-ray diffraction investigation of the ... S/020/63/148/003/019/037  
B108/B180

coercive force associated with this alloy.

ASSOCIATION: Institut metallovedeniya i fiziki metallov Tsentral'nogo  
nauchno-issledovatel'skogo instituta chernoy metallurgii  
(Institute of Metal Science and the Physics of Metals of the  
Central Scientific Research Institute of Ferrous Metallurgy) ✓

PRESENTED: July 18, 1962, by G. V. Kurdyumov, Academician

SUBMITTED: July 17, 1962

Card 2/2

BE ZUGLYY, S.F.; LUKANINA, V.S.

Petroleum oil emulsion (preparation No.30) for summer spraying  
of fruit trees against the San Jose scale. [Trudy] NIUIF  
no.181:103-110 '61. (MIRA 15:7)  
(San Jose scale) (Petroleum products)  
(Insecticides)

KLADCHIKOV, S.M.; LUKANINA, Ye.U.; POLYANSKAYA, V.F.

[Methods of calculating production costs on collective farms]  
O sebestoimosti produktsii v kolkhozakh; metodika ischisleniia.  
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 109 p.

(MIRA 13:12)

(Farm produce--Costs)

LUKANINA, M.I.

Svanbergite in bauxites of Kamensk District in the Central Urals.  
Zap. Vses. min. ob-va 88 no.5:586-591 '59. (MIRA 13:2)  
(Kamensk District--Svanbergite)

LUKANINA, N. D.

PA 242T30

USSR/Electricity - Distribution Systems Dec 52

"Engineering Economic Comparison of Two Circuits for a City Electric Power Network," Engr N. D. Lukanina and Engr L. M. Shiberle, Leningrad Eng Economic Inst imeni Molotov

"Elektrichestvo" No 12, pp 66-69

Gives eng economic comparison of two types of low-voltage closed circuits for sections of new multi-story dwelling on basis of planning data. Compares networks constructed on so-called semi-closed circuit and on closed circuit. Submitted 5 Nov 51.

242T30

YASTREBOVA, L.N., kand.geolog-mineralogicheskikh nauk; LUKANINA, T.M., inzh.

Stabilizing soils by synthetic resins of high molecular weight. Avt.  
dor. 24 no.2:16-17 F '61. (MIRA 14:3)  
(Soil stabilization) (Resins, Synthetic)

LUKANINA, V. G.

"The Physiological Characteristic of Pine Tree Seedlings During the First Year of Vegetation." Cand Biol Sci, Tomsk State U imeni V. V. Kuybyshev, Tomsk, 1954.  
(KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: SUM No. 556, 24 Jun 55

USSR / Forestry. Forest Crops.

K-3

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24898.

Author : ~~Lukanina, V. G.~~  
Inst : Not given.  
Title : Influence of Mineral Fertilizers on the Process of  
Pine Seedlings Rooting in the Conditions of the  
Karaul' Woodland.

Orig Pub: Tr. Sibirsk. lesotekhn. in-ta, 1956, sb. 14, 13-26.

Abstract: Application of mineral fertilizers under pine seedlings better promotes their vigorous upward growth, the renewal and growth of the root system, and quickens the process of striking root. In the first half of the vegetation period phosphoric fertilization shows a particularly-favorable influence on the growth and development of the seedlings. Potash fertilizer promotes the forming of an assimilative apparatus.

Card 1/1

38

BEZUGLIY, S.F.; SARISHVILI, I.G.; LUKANINA, V.S.; POKROVSKIY, Ye.A.;  
UNTERBERGER, V.K.

Investigation of the chemical stability of mineral oils and oil  
fractions and development of nonphytotoxic emulsions based on  
them for controlling pests of citrus and other fruit cultures.  
[Trudy] NIUIF no.164:34-35 '59. (MIRA 15:5)  
(Insecticides)

LEKHANINA, Ye.A., *Vand Bio Sci*—(disc) "Nutrition of certain fresh-water  
Gastropoda." Mos, 1958. 11 pp (Mos Technological Inst of Fish<sup>Industry</sup> and  
~~Fish Industry~~ in A.I. Nikoyan), 135 copies (KL,49-56,122)

LIKANKIN, G.I.

Behavior of Temliakov type integrals of the first kind at skeleton points of an A type D-region. Dokl. AN SSSR 161 no.1:39-42 Mr '65.  
(MIRA 18:3)

1. Moskovskiy oblastnoy pedagogicheskiy Institut im. N.K. Krupskoy.  
Submitted August 17, 1964.

LUNIN, N.; LUKANKIN, V.

What hinders engineers of heavy freight trains. Sots.trud no.1:  
72-75 Ja '56. (Railroads--Freight) (MIRA 9:7)

LUKANKIN, V.

ZAKHARENKO, N.; LUKANKIN, V.

Wages of mixed and shunting crews in railroad transportation. Sots.  
trud.no.9:57-62 S '56. (MIRA 9:12)  
(Railroads--Salaries, pensions, etc.)

LUKANKO, Mieczysław

Sheet cutting aggregates of cold rolling mills. Problemy proj  
hut maszyn 13 no.4:115-122 Ap '65.

1. Biprostal, Krakow.

LUKANOV, A.

"Good Conditions for Scientific Research Work Everywhere." p. 3,  
(ZDRAVEN FRONT, No. 46, Nov. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

LUKANOV, A.

"Transformative Power." p. 4,  
(ZDRAVEN FRONT, No. 46, Nov. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

LUKANOV, A. T.

Surgical treatment of osteoarticular tuberculosis in Bulgaria.  
Vest. khir. 70:3, 1950. p. 50-3

1. Head Assistant of the Propedeutic Surgical Clinic of Sofia  
University, Bulgaria.

CLML 19, 5, Nov., 1950

LUKANOV, A., and others

"Treatment of Slow-Healing and Atonic Wounds by the Method of Academician Metodii Popov's Method." p.85, Izvestiia, Sofiya. Vol. 3, 1953

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

LUKANOV, A., gl. khirurg na instituta; KUNCHEV, Gr., st ordinator

Severe open injuries and gunshot wounds of the abdomen and their therapy. Khirurgia 7 no.1:6-20 1954.

1. Institut za burza meditsinska pomoshch "N.I.Pirogov." Glaven  
lekar: A.I.Simeonov.  
(ABDOMEN, wounds and injuries,  
\*ther.)  
(WOUNDS AND INJURIES,  
\*abdomen, ther.)

LUKANOV, A.; GANCHEV, G.; GRUEV, Iv.

Acute appendicitis in children. Khirurgia, Sofia 7 no.8:458-465  
1954.

1. Meditsinska Akademiia V.Chervenkov, Sofia. Propedevtichna  
khirurgichna klinika. Zavezhdashch katedrata: prof. G.Kapitanov.  
Institut za Burza Meditsinska Pomoshch N.I.Pirogov. Glaven lekar:  
A.Simeonov. Glaven khirurg: A.Lukanov.  
(APPENDICITIS, in infant and child,  
surg.)

LUKANOV, A.F., st. assistant d-r. (Bolgariya, Sofiya, Aleksandrovskaia  
bol'nitsa. Klinika kafedry operativnoy khirurgii)

New technique in creating a permanent artificial anus. Vest. khir.  
74 no.5:69-71 J1-Ag '54. (MIRA 7:10)

1. Iz kliniki kafedry operativnoy khirurgii (zav. dots. A.N.  
Brokhovich) Meditsinskoy akademii imeni V.Chervenкова (Sofiya)  
(ANUS, surgery,  
artif., technic)

LUKANOV A.; TSENOV, Ts.

Ileus and its therapy. Khirurgiia, Sofia 8 no.1:10-21 1955.

1. Institut za burza meditsinska pomoshch "N. I. Pirogov" -  
Sofia. Glaven lekar: B. Devetakov. Glaven Khirurg: Al. Lukanov.  
(INTESTINAL OBSTRUCTION, surgery)

LUKANOV, Al; ANASTASOV, Cp.

Case of combined severe gunshot wound of the stomach and left urinary tract. Khirurgia, Sofia 8 no.2:177-181 1955.

(WOUNDS AND INJURIES,

gunshot, stomach & urinary tract)

(STOMACH, wounds and injuries,

gunshot, gastro-urinary wds.)

(URINARY TRACT, wounds and injuries,

gunshot, gastro-urinary wds)

LUKANOV, A.

Surgical acute abdomen. Kirurgia, Sofia 8 no.9:810-824 1955.  
(ABDOMEN, ACUTE, surgery,  
(Bul))

LUKANOV, A., Dots.

70th anniversary of birth of Lorents B'oler. Khirurgiia,  
Sofia 9 no.3:280-281 1956.

(BIOGRAPHIES,  
B'oler, Lorets (Bul))

LUKANOV, A., Dots.; IKONOMOV, Iv.

Cerebrocranial trauma in children. Khirurgia, Sofia 9 no.  
7-8:582-595 1956.

1. Institut za burza meditsinska pomoshch N.I. Pirogov--Sofia  
gl. lekar: B. Devetakov.  
(BRAIN, wounds and injuries,  
in child. (Bul))

LUKANOV, A.; POPIVANOV, I.

Tissue, bacteria, infection, Khirurgia, Sofia 10 no.12:1057-1064 1957.

1. Institut za burza meditsinska pomoshch "N. I. Pirogov"--sofia Gl.

lekar: B. Dayetakov.

(INFECTION, physiology

tissue & bacteriol. factors (Bul))

EXCERPTA MEDICA Sec.9 Vol.12/5 Surgery May 1958

*LUKANOW, A*

2544. (668) PERSONAL EXPERIENCE IN THE TREATMENT OF FRACTURES OF THE SPINE - Nasze doświadczenia w leczeniu złamań kręgosłupa - Łukanow A. Inst. Chir. Urazowej im. Pirogowa, Sofia - CHIR. NARZĄD. RUCHU 1957, 22/4 (459-462)

Report on 228 cases of spinal fractures, including 43 fractures associated with spinal cord lesion. The treatment is discussed. In fractures with cord injuries, and in shot-fractures, surgical treatment is advocated. Prevention of urinary sepsis and emaciation, decubitus ulcerations and digestive tract disturbances is discussed. (LX, 8)

LUKANOV, A., dots.

General principles of gastric surgery. Khirurgiia, Sofia 13 no.6:

571-577 '60.

(GASTRECTOMY)

LUKANOV, A., prof.

Basic principles for the diagnostic and therapeutic management of acute combined trauma. *Khirurgiia* (Sofia) 16 no.10:907-915 '63.

1. Institut za spetsializatsiia i usuvurshenstvuvane na lekarite, katedra po speshna khirurgiia, Sofia. Rukovoditel na katedrata: prof. A.Lukanov.

\*

LUKANOV, A., prof.

New and controversial problems in the treatment of wounds.  
Khirurgia 17 no.2:128-131 '64.

LUKANOV, A.

Conditions and problems of emergency surgery in the Bulgarian  
People's Republic. Khirurgia (Sofia) 18 no.3:284-291 '65.

BULGARIA/Chemical Technology. Chemical Products and Their Applications. Dyeing and Chemical Treatment of Textile Materials. II

Abs Jour: Ref Zhur-Khin., No 8, 1959, 29898.

Author : Lukanov, E. and Gvozdicva, K.

Inst :

Title : Dyeing and Printing with Pigmented Dyes.

Orig Pub: Leka Promishlenost Tekstil, 7, No 4, 16-18 (1958)  
(in Bulgarian)

Abstract: The authors discuss the advantages and application methods of pigmented dyes of the oron, printofix, acramine, and helizarin type, using literature data. The need for the introduction of such dyes in Bulgarian textile practice is noted. The relative

Card : 1/2

DULGERLI./Chemical Technology. Chemical Products and Their Applications. Dyeing and Chemical Treatment of Textile Materials.

II

Abs Jour: Ref Zhur-Khin., No 8, 1959, 29898.

volume of pigmented dye utilization in textile printing is 300% [sic] in the GDR, 13% in Hungary, 7% in Poland, and 5% in Czechoslovakia. -- K. Markuze.

Card : 2/2

327

VASILEV, I.; IVANOV, D.; LUKANOV, I.

Miniature transistor apparatus for long-distance recording  
of pulse shocks. Ratsionalizatsia 13 no. 11:16-17 '63

LUKANOV, K., ekonomist

Flour milling industry in Bulgaria. *Muk.-elev. prom.* 29 no.5:  
22-23 My '63. (MIRA 16:7)

1. Institut pishchevoy i vkusovoy promyshlennosti v Plovdive,  
Bolgariya.

(Bulgaria--Flour mills)

LUKANOV, K.

Oils and fats industry of the Bulgarian People's Republic.  
Masl., zhir. prom. 29 no.8:31-33 Ag '63. (MIRA 16:10)

1. Vysshiy institut pishchevkusovoy promyshlennosti, Plovdiv.

LUKANOV, Kamen M. (Plovidiv)

Development of the sugar industry in the Bulgarian People's  
Republic. Sakh.prom. 37 no.2:8(88)-11(91) F '63. (MIRA 16:5)  
(Bulgaria--Sugar industry)



MIKHOV, N., inzh.; TSANEVA, N., d-r, starshi nauchen sutrudnik;  
MASHKAROV, B., inzh., starshi nauchen sutrudnik; LUKANOV, M.,  
d-r dots., starshi nauchen sutrudnik; STAROSTINA, V., arkh.;  
DOROSIEV, B., arkh; BELCHEV, N., arkh.; GUGOV, N., inzh.

Conference on science and technology for youth. Nauka i tekhn  
mladetzh 14 no.6:2-4 Je '62.

1. Direktor na fabrika "Ernst Telman", Sofiia (for Mikhov).
2. Institut po okhrana na truda i profesionalnite bolesti  
(for Tsaneva, Maskarov, and Lukanov).
3. Starshi proektant  
pri "Zavodproekt" (for Starostina).
4. Glaven spetsialist  
pri Komiteta po promishlenostta (for Dorosiev).
5. Grupov  
rukovoditel pri "Promproekt" (for Belchev).
6. Nachalnik  
Otdel "Mashinostroene i elektropromishlenost" pri Komiteta  
po tekhnikeskiaa progres (for Gugov).

CZECHOSLOVAKIA/BULGARIA UDC 616.152(:546815)-074 :545.33

MOSEVA, Nelly; Research Institute for Health Hazards and Occupational Diseases, Sofia, Bulgaria, Director Docent Dr M. LUKANOV.  
[Original version not given]

" Comparative Evaluation of the Polarographic Method of Lead Determination Without Blood Mineralization and of the Dithizone Method."

Prague, Pracovni Lekarstvi, Vol 18, No 2, March 66, pp 69-72

Abstract [Author's English summary modified]: The author modified Teisinger's polarographic method by using a larger capillary and increasing the flow of Hg. The height of the Pb wave in HCl solution was twice as high as the wave for an identical amount of Pb in a deproteinized blood filtrate. For a standard lead solution the results of the polarographic and dithizone methods agree. The differences in the determination of Pb are explained in Pracovni Lekarstvi, Vol 18, No 2, pp 72 - 78. 1 Figure, 2 Table., 1 Western, 2 Czech, 1 Yugoslav reference. (Manuscript received Oct 64).

1/1

LUKANOV, Metodi, agr.

Experiments in the leveling of irrigation areas in the district of  
Mikhaylovgrad. Khidrotekh i melior 7 no.2:64 '62.

LUKANOV, Methodi, agr.

Highly productive irrigation of light soils. Khidrotakh i melior  
9 no.10:313-315 '64.

LUKANOV, M.A.

POGORELYY, I.P.; CHISTYAKOV, V.D.; LUKANOV, M.A.; PESTRYAKOV, A.I., re-  
daktor; SMIRNOVA, Ye.A., tekhnicheskiy redaktor.

[Tractor repair] Remont traktorov. Moskva, Gos. izd-vo selkhoz.  
lit-ry, 1954. 398 p. [Microfilm] (MLRA 7:12)  
(Tractors--Repairing)

*LUKANOV M.A.*  
ARTEM'YEV, Yu.N., kandidat tekhnicheskikh nauk; ALEKSEYEV, I.A., inzhener;  
ASTVATSATUROV, G.G., inzhener; BISNOVATYY, S.I., inzhener; BONDAREN-  
KO, A.F., inzhener; GURAL'NIK, Ye.L., inzhener; GOBBUNOV, M.F., inzhener;  
ZLATKOVSKIY, A.P., kandidat tekhnicheskikh nauk; KATTS, N.V., inzhener;  
KITAYEV, A.S., inzhener; KOZLOV, A.M., inzhener; LEONOV, P.T., inzhener;  
LIVSHITS, L.G., kandidat tekhnicheskikh nauk; LIBERMAN, A.R., inzhener;  
LINNIK, Ye.M., inzhener; LUKANOV, M.A., inzhener; MOROZOV, S.A., inzhener;  
POGORELIY, I.P., kandidat tekhnicheskikh nauk; PETROV, S.A., kandidat tekhnicheskikh nauk;  
PYATETSKIY, B.G., inzhener; RABOCHIIY, L.G., kandidat tekhnicheskikh nauk;  
SELIVANOV, A.I., kandidat tekhnicheskikh nauk; FERBERG, B.S., kandidat tekhnicheskikh nauk;  
CHISTYAKOV, V.D., inzhener; CHUNIKHIN, V.M., inzhener; SHIRYAYEV, A.I., inzhener;  
SHCHUPAK, A.D., inzhener; KUCHUMOV, P.S., inzhener, redaktor; PETROV, S.A.;  
PESTRYAKOV, A.I., redaktor; BALLOD, A.I., tekhnicheskii redaktor.

[Handbook of equipment for repairing tractors and agricultural machinery] Spravochnik po oborudovaniyu dlia remonta traktorov i sel'skokhoziaistvennykh mashin. Moskva, Gos. izd-vo selkhoz. lit-ry, 1954. 646 p.  
(MLRA 7:11)

(Tractors--Repairing) (Agricultural machinery--Maintenance and repair)

*LUKANOV, M.A.*

POGORELYY, Ivan Pavlovich; CHISTYAKOV, V.D.; LUKANOV, M.A.; ROZIN, M.A., red.;  
PEVZNER, V.I., tekhn.red.

[Tractor repairing] Remont traktorov. Izd.3-e, dop.1 ispr. Moskva,  
Gos.izd-vo sel'khoz.lit-ry, 1957. 495 p. (MIRA 11:1)  
(Tractors--Maintenance and repair)

LUKANOV, M.A.

DOMBRACHEVA, Ye.F.; KOZLOV, A.M.; KRIGEVSKIY, M.Ye.; LAPITSKIY, M.A.;  
LISTOVSKIY, N.D.; LUKANOV, M.A.; MANUKOV, N.P.; MICHURINA, V.V.;  
POLYACHENKO, A.V.; TIMOFYEV, N.A.; TSVETKOV, V.S.; CHISTYAKOV,  
V.D.; KOPEYKIN, P.A., inzh., red.; KRYUKOV, V.L., red.; KOBILYAKOV,  
L.M., red.; ZUBRILINA, Z.P., tekhn. red.

[Practices in tractor repair] Opyt remonta traktorov. Moskva, Gos.  
izd-vo sel'khoz. lit-ry, 1958. 301 p. (MIRA 11:7)  
(Tractors--Maintenance and repair)

ARTEM'YEV, Yu.N., kand. tekhn. nauk; ASTVATSATUROV, G.G., inzh.;  
BARABANOV, V.Ye., inzh.; BARYKOV, G.A., inzh.; BISHOVATYY, S.I.,  
inzh.; GALAYEVA, L.M., inzh.; GAL'PERIN, A.S., kand. tekhn. nauk;  
GAL'CHENKO, I.I., inzh.; GONCHAR, I.S., kand. tekhn. nauk;  
DEGTYAREV, I.L., kand. tekhn. nauk; DYADYUSHKO, V.P., inzh.;  
YERMAKOV, I.N., inzh.; ZHOTKEVICH, T.S., inzh.; ZUSMANOVICH, G.G.,  
inzh.; KAZAKOV, V.K., inzh.; KOZLOV, A.M., inzh.; KOROLEV, N.A.,  
inzh.; KRIVENKO, P.M., kand. tekhn. nauk; LAPITSKIY, M.A., inzh.;  
LEBEDEV, K.S., inzh.; LIBERMAN, A.R., inzh.; LIVSHITS, L.G., kand.  
tekhn. nauk; LOSEV, V.N., inzh.; LUKANOV, M.A., inzh.; LYUBCHENKO,  
A.M., inzh.; MAMEDOV, A.M., kand. tekhn. nauk; MATVEYEV, V.A.,  
inzh.; ORANSKIY, N.N., inzh.; POLYACHENKO, A.V., kand. tekhn. nauk;  
POFOV, V.P., kand. tekhn. nauk; PUSTOVALOV, I.I., inzh.;  
PYTCHENKO, P.I., inzh.; PYATETSKIY, B.G., inzh.; RABOCHIY, L.G.,  
kand. tekhn. nauk; ROL'BIN, Ye.M., inzh.; SELIVANOV, A.I., doktor  
tekhn. nauk; SEMENOV, V.M., inzh.; SKOROKHOD, I.I., inzh.; SLABODCHIKOV,  
V.I., inzh.; STORCHAK, I.M., inzh.; STRADYMOV, F.Ya., kand. tekhn.  
nauk; SUKHINA, N.V., inzh.; TIMOFEYEV, N.D., inzh.; FEDOSOV, I.M.,  
kand. tekhn. nauk; FILATOV, A.G., inzh.; KHODOV, L.P., inzh.;  
KHROMETSKIY, P.A., inzh.; TSVETKOV, V.S., inzh.; TSEYTLIN, B.Ye.,  
inzh.; SHARAGIN, A.M., inzh.; CHISTYAKOV, V.D., inzh.; BUD'KO, V.A.,  
red.; PESTRYAKOV, A.I., red.; GUREVICH, M.M., tekhn. red.

(Continued on next card)

ARTEM'YEV, Yu.N.--- (continued) Card 2.

[Manual on the repair of machinery and tractors] Spravochnik po  
remontu mashinno-traktornogo parka. Pod red. A.I.Selivanova.  
Moskva, Sel'khozizdat. Vols.1-2. 1962. (MIRA 15:6)  
(Agricultural machinery--Maintenance and repair)  
(Tractors--Maintenance and repair)

POGORELYY, I.P.; LAPITSKIY, M.A.; LUKANOV, M.A.; ASTVATSATUROV, G.G.;  
TSVETKOV, V.S.; LOSEV, V.N.; CHUNIKHIN, V.N.; FOZLOV, A.M.;  
CHERKASOV, Yu.I.; KHODOV, L.P.; KLIMENKO, A.K.

[Technology of the dismantling, assembly and adjustment of the mechanisms of DT-54 and DT-54A tractors with technical charts for the repair of major parts] Tekhnologiya razborki, sborki i regulirovki mekhanizmov traktorov DT-54 i DT-54A s tekhnologicheskimi kartami remonta vazhneishikh detalei. Moskva, Biuro tekhn. informatsii, 1963. 565 p. (MIRA 17:9)

1. Perovo. Gosudarstvennyy Vsesoyuznyy nauchno-issledovatel'skiy tekhnologicheskii institut remonta i ekspluatatsii mashinno-traktornogo parka.

LUKANOV, P.

Bulgaria

[Academic Degrees]

[Affiliation] Director of Internal Section with the II Sofia  
City Hospital (Zavezhdasht vutreshno otdelenie  
pri II gradska bolnitsa -- Sofia)

[Source] Sofia, Sreden Meditsinski Rabotnik, No 6, 1962, pp 30-33.

[Data] "The Problems of the Station Nurse and her Common Work  
with the Station Doctor in Serving Those Sick at Home."

*Lukacov, S. Yu.*

*434*  
*✓*  
*Atomic Energy*

HARD X-RADIATION ACCOMPANYING A DISCHARGE IN A GAS. S. Yu. Lukacov and I. M. Podgornyi. *31*  
*Sci. J.*  
Atomic Energy, No. 3, 389-98 (1959).

It is shown that a powerful gas discharge at low pressure is accompanied by the emission of hard x-ray quanta. The radiation is observed in the discharge in various gases. The main properties of the radiation are studied, and consideration is given to a possible mechanism of origin of the effect observed. (auth)

*71*

COUNTRY : BULGARIA ii  
CATEGORY : Chemical Technology. Chemical Product and  
their Applications. Chemical Wood Products\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83687  
AUTHOR : Dimov, K.; Lokanov, T.; Zhulev, S.  
: Khim - Technol. Institute  
TITLE : Experiments in the Obtainment of Furfural from  
Sunflower Seed Hulls  
ORIG. PUB. : Godishnik Khim.-tekhno. in-t, 1957(1958), 4  
No 1, 43-53  
ABSTRACT : Experiments were conducted with the purpose of  
establishing optimum conditions for the pre-  
-hydrolysis step and subsequent obtainment of  
the maximum yield of furfural (I) with the  
condition that the derived cellulose (C) will  
be suitable for chemical treatment. It was  
demonstrated that with the increase of hydro-  
-modulus by a factor of 2 (from 3 to 6) the  
yield of I increases rapidly while the ash and

\*Hydrolysis Industry.

CARD: 1/3



COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83687  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : level is 4.5 - 5.0 at which the yield of I is  
Con'd 36.9% and the obtained C is suitable for che-  
mical refining (CR=417). The yield of I in-  
creases when I is removed from the reaction  
mixture at a high rate.

CARD: 3/3

LUKANOV, T.

New synthetic fibers. p. 13.  
LEKA PROMISHLENOST. Vol. 5, no. 7, 1957.  
Sofia, Bulgaria.

SOURCE: East European Accessions List, (EEAL) Library of  
Congress, Vol. 6, No. 1, January 1957

BULGARIA/Chemical Technology - Chemical Products and Their  
Application. Dyes and Chemical Treatment of  
Textile Materials.

II-34

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 59651

Author : Dimov, K., Lukanov, T., Bozheryanov, Yu.

Inst : -

Title : The Use of Carbamide- and Carbamidemelaminoformaldehyde  
Resins for Decreasing the Crumpling of Viscose Staple  
Fiber (Wool Type) Fabrics.

Orig Pub : Leka promishlenost, 1957, 6, No 9, 13-17.

Abstract : The conditions were established for the extraction of  
stable urea-formaldehyde precondensates, which do not  
change their properties during a one-month storage pe-  
riod. This allows accomplishing centralized product  
preparation in one chemical enterprises for satisfying  
the needs of the entire textile industry of the country.  
The introduction of 20-30% melamine into the composition

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BULGARIA/Chemical Technology - Chemical Products and Their  
Application. Dyes and Chemical Treatment of  
Textile Materials.

H-34

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 59651

of the precondensate strongly furthers the fixation of the resin and the increase of the resistance of the finishing to crumpling and washing. The introduction of non-crumpling finishing into the industry is being delayed by the lack of closed drying-stretching frames and chambers for carrying out the process of condensation.

Card 2/2

BULGARIAN/Chemical Technology. Chemical Products and Their  
Application. Dyeing and Chemical Treatment of  
Textile Materials.

8-34

Abstr Jour: Ref Zhur-Khim., No 2, 1959, 6899.

Author : Dinov, K.; Topalov, K.; Lukmanov, T.; Arbov, D.

Inst :

Title : Experiment of Producing White Reserve by Glacial (Azide)  
Dyeing.

Orig Pub: Leka promishlenost. Tekstil, 1958, 7, No 1, 25-30.

Abstract: The resisting action of various reducing agents,  
salts of metals and organic acids to various azo-  
amines (in respect to Azotel A) was studied, and the  
compositions of resisting printing dyes yielding  
optimum results are selected. - O. Golosenko.

Card : 1/1

168

LUKAN'OVA, A.M.

Changes in conditioned reflexes of dogs caused by artificial disorders in the normal reaction to food. Report no.1: Changes in conditioned reflexes of satiated dogs [with summary in English]. Fiziol.zhur. [Ukr.] 3 no.2:30-38 Mr-Apr '57. (MIRA 10:6)

1. Kiivs'kiy naukovo-doslidniy institut kharchuvaniya.  
(CONDITIONED RESPONSE) (FOOD)

VYROSTEK, J.; LUKAN, J.; LUKANOVA, K.; BERES, M.; TEICHNER, F.

Surgical therapy of laryngeal cancer in the Otorhinolaryngological Clinic in Kosice. Cesk. otolaryng. 14 no.5:268-271  
0 '65.

1. Otolaryngologicka klinika Lekarskej fakulty University  
P.J. Safarika v Kosiciach (prednosta: prof. dr. M. Suster,  
DrSc.).

RUBTSOV, V.A.; SERGEYEV, V.I.; LUKANOVA, M.V.; KRASIL'NIKOV, A.I.;  
KRYUKOVA, V.N.; BALYUTINA, O.I.

Handbook on flax spinning. Reviewed by V.A.Rubtsov and others.  
Tekst.prom. 18 no.10:63-65 0 '58. (MIRA 11:11)

1. Zaveduyushchaya tekhnicheskoy bibliotekoy Orshanskogo l'no-  
kombinata (for Balyutina).

(Flax)

POLAND / Human and Animal Physiology. Excretion. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41375.

Author : Nagorski, F.; Nyrek, St.; Mazurezak, J.; Lukanska, F.  
Inst : Not Given.  
Title : Determination of the Glucuronic Acid Level in the  
Urine of Horses.

Orig Pub: Med. weteryn., 1957, 13, No 5, 279-282.

Abstract: The content of glucuronic acid in the urine of healthy (3-18 year old) horses as determined by the method of Quick, was 35.6-105.7%mg%. Twenty-four hours elimination was equal to 1,875-5,294g (it increased with age): no regular fluctuations of elimination during 24 hour periods were established.

Card 1/1

LUKANSKAYA, E. (Lida)

Trains race past their house. Rab. i sial. 39 no.9:8-9  
S '63. (MIRA 16:11)

LUKANSKAYA, E.; SOBOLENKO, T., tekhn.

[Minsk Automobile Plant]Minskii avtomobil'nyi zavod. Minsk,  
Gos. izd-vo BSSR, 1962. 1 v. (MIRA 15:11)

1. Minskii gosudarstvennyy avtomobil'nyy zavod.  
(Minsk--Motortrucks--Design and construction)

LUKANSKAYA, E.

What should she tell Liudmila? Rab.1 sial. 38 no.7:4 JI '62.  
(MIRA 16:5)

1. Podshipnikovy zavod, Minsk.  
(Minsk--Bearing industry)

LUKANSKAYA, Ema (g.Bobruysk)

The ice is broken and her heart is full of joy. Rab.I sial.  
38 no.3:6-7 Mtr '62. (MIRA 13:2)  
(World War,1939-1945--Children)

LUKANSKAYA, R. N., Candidate Med Sci (diss) -- "Basal metabolism in cardiac patients with circulatory insufficiency and factors affecting it". Minsk, 1959. 12 pp (Minsk State Med Inst), 200 copies (KL, No 22, 1959, 121)

LUKANSKAYA, R.N., kand.med.nauk

Determination of thyroid gland function by means of radioactive iodine-131 in patients with insufficient circulation. Zdrav. Belor. 6 no. 10:23-24 0 '60. (MIRA 13:10)

1. Fakul'tetskaya terapevticheskaya klinika Minskogo meditsinskogo instituta (zav.kafedroy - akademik AN BSSR B.I. Trusevich).  
(THYROID GLAND) (IODINE--ISOTOPES)  
(BLOOD--CIRCULATION, DISORDERS OF)

LUKANSKAYA, R.N., kand.med.nauk

Vacat O in the urine in heart patients with circulatory insufficiency.  
Zdrav. Bel. 7 no.3:23-25 Mr '61. (MIRA 14:3)

1. Fakul'tetskaya terapevticheskaya klinika Minskogo meditsinskogo  
instituta (zaveduyushchiy kafedroy - akademik AN BSSR B.I.Trusevich).  
(URINE--ANALYSIS AND PATHOLOGY)  
(HEART--DISEASES)  
(BLOOD--CIRCULATION, DISORDERS OF)

*LUKANSKIY, N. N.*

LUKANSKIY, N.N., kapitan; MATVEYEV, V.P., kapitan; BELYY, Ya.N., starshiy  
leytenant.

Methodology in teaching computations for antiaircraft guns.

Artill. zhur. no.1:13-17 Ja '58.

(MIRA 11:2)

(Antiaircraft guns)

LUKANSKIY, N.N.

ZAKIROV, U.A., starshiy leytenant; ZAGORSKIY, B.S., starshiy leytenant;  
BUKANSKIY, N.N., kapitan.

Working with the DS-0,9 range finder. Artill. zhur. no.9-13 Ja '58.  
(MIRA 11:2)

(Range-finding)

LUKANTSEVER, D.S.

Influence of pregnancy and labor on the course of pulmonary tuberculosis. Zdrav. Belor. 5 no.9:18-19 S '59. (MIRA 12:12)

1. Gomel'skiy oblastnoy protivotuberkuleznyy dispanser.  
(TUBERCULOSIS) (PREGNANCY)

~~LUKANTSEV, L.; KOTEL'NIKOV, A.~~

Work of the Gomel' branch of the All-Union Phthisiologists'  
Society for 1957. Zdrav.Belor. 4 no.3:76 Nr '58. (MIRA 13:7)  
(GOMEL--TUBERCULOSIS)

LUKANTSEVER, Yu. D., Frunze Kirghiz Institute of Pedagogics  
(Kirgizskiy pedinstitut, Frunze)

"The rules governing the dying down of the intensity of phosphorescence, photo-conductivity, and the light sum in the phosphorus ZnS-Cu in an ideal crystal phosphorus"

Report presented at a Conference on Solid Dielectrics and Semiconductors,  
Tomsk Polytechnical Inst., 3-9 Feb. 58.  
(Elektrichestvo, '58, No. 7, 83-86)

LUKANTSEVER, Yu. L.

SUBJECT: USSR/Luminescence

48-4-13/48

AUTHORS: Lukantsever Yu.L. and Krasovskaya L.R.

TITLE: Investigation of Electron Localization Levels in ZnS-Cu-Phosphor (Issledovaniye urovney lokalizatsii elektronov v fosfore ZnS-Cu)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21 #4, pp 511-520 (USSR)

ABSTRACT: Capture levels in the ZnS-Cu-phosphor were investigated by means of optical methods.

The phosphor luminescence was excited by the filtered light of a PRK-4 mercury tube (365 mμ). The Luminescent light was incident, through a filter, on a photoelectronic multiplier of the FEU-17 type connected with an amplifier.

The following conclusions were drawn from the results of investigations:

1. Determination of energies necessary for liberation of electrons from the deepest localization levels was performed by 3 independent methods:

Card 1/2

TITLE:

Investigation of Electron Localization Levels in ZnS-Cu-<sup>48-4-13/48</sup>  
Phosphor (Issledovaniye urovney lokalizatsii elektronov v  
fosfore ZnS-Cu)

- a. By analysis of thermal de-luminescence curves,
- b. By analysis of regularities in the phosphor decay in the region of temperature quenching, and
- c. By analysis of the temperature-dependence of the light-sum in the region near temperature quenching.

All three methods yield results agreeing well within the limits of measurement accuracy.

2. Within the temperature range, in which the phosphor behaves ideally, one can apply the method of decay analysis for the determination of the energy depth of these levels. The report was followed by a discussion.

The bibliography lists 9 references, of which 7 are Slavic (Russian).

INSTITUTION: Tomsk State University.  
PRESENTED BY: By Vergunas F. I.  
SUBMITTED: No date indicated.  
AVAILABLE: At the Library of Congress.

Card 2/2

LUKANTSEVER, Yu.L.

Ratio of capture probability to probability of recombination of  
electrons in ZnS - Cu and ZnS, Cu, Co crystalline phosphors. Izv.  
vys. ucheb. zav.; fiz. no.2:95-102 '58. (MIRA 11:6)

1.Tomskiy gosudarstvennyy pedinstitut.  
(Phosphors) (Electrons)

LUKANTSEVER, Yu.L.

Ratio of capture probability to probability of recombination of  
electrons in ZnS - Cu and ZnS-Cu, Co crystalline phosphors.  
Izv. vys. ucheb. zav.; fiz. no.3:30-38 '58. (MIRA 11:9)

1. Tomskiy gosudarstvennyy pedinstitut.  
(Phosphors) (Electrons)

NOV/199-58-5-32/35

AUTHOR: Lukantsever, Yu. L.

TITLE: Investigation of Certain Relaxation Processes in ZnS-Cu Phosphors (Issledovaniye nekotorykh relaksatsionnykh protsessov v ZnS-Cu fosfore)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, fizika, 1958, Nr 5, pp 153-158 (USSR)

ABSTRACT: It is well known that the intensity of photoluminescence of certain phosphors decays only approximately exponentially after removal of the exciting radiation. The departure from a true exponential law is attributed to certain temperature dependent relaxation processes. The present paper describes an experiment to investigate this effect at various temperatures in ZnS-Cu phosphor. The phosphor was irradiated by ultraviolet light of wavelength 3650 Å from a standard PRK-4 lamp and the excited luminescent intensity was measured on a photomultiplier tube FEU-17; there was facility for uniform heating of the phosphor up to temperatures of approximately 500°K. The logarithm of luminescent intensity plotted against time would be a straight line for a strictly exponential decay; the experimental results for all temperatures gave curves which were concave upwards. Moreover, the mean rate of decay increased sharply above 450°C, indicating that a new relaxation

Card 1/3

SOV/139-58-5-32/35

## Investigation of Certain Relaxation Processes in ZnS-Cu Phosphors

process was coming into operation at around this temperature. Empirical formulae may be fitted to the decay curves by postulating an 'exponential' law  $I \sim e^{-\alpha t}$  in which the coefficient  $\alpha$ , of time  $t$ , is itself a weakly dependent function of the luminescent intensity  $I$ . The parameters of this slowly-varying function themselves depend on temperature. Thus one has a series of effective decay constants  $\alpha_1(T)$ ,  $\alpha_2(T)$  etc. for the various relaxation processes: each  $\alpha$  becomes operative at the temperature corresponding to the activation of its associated electron energy band. The correlation of these results with the 'relaxation' behaviour of electrical conductivity of the phosphor is also briefly

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SOV/139-58-5-32/35

Investigation of Certain Relaxation Processes in ZnS-Cu Phosphors

discussed. The work was first reported at the Conference of Higher Education Establishments on Dielectrics and Semiconductors at Tomsk, February, 1958. The paper contains 5 figures and 19 references (1 English, 3 German and 15 Soviet).

ASSOCIATION: Tomskiy pedinstitut (Tomsk Pedagogical Institute)

SUBMITTED: January 23, 1958.

Card 3/3

LUKANTSEVER, Yu. L., Candidate Phys-Math Sci (diss) -- "The determination of the relation of the probability of capture to the probability of recombination of electrons in ZnS-Cu and ZnS-Cu, Co-phosphors close to and in the region of temperature extinction of luminescence". Tomsk, 1959. 12 pp (Min Higher Educ USSR, Siberian Phys-Tech Inst of the Tomsk State U im V. V. Kuybyshev), 115 copies (KL, No 22, 1959, 108)

22164

S/048/61/025/004/013/048  
B104/B201

24,3500

AUTHORS: Lukantsever, Yu. L. and Zaitov, F. N.

TITLE: Possibility of the thermal activation of the trapping of charge carriers in crystal phosphors

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 4, 1961, 473-476

TEXT: The present paper has been read at the 9th Conference on Luminescence (Crystal Phosphors), Kiyev, June 20-25, 1960. Results are presented relative to studies that indicate the possibility of a thermal activation of the trapping of charge carriers. The experiments were performed on ZnS-Cu ( $10^{-4}$  g/g), non-activated NaCl, NaCl-Ca (0.5 mole%), and KCl-Ca, Ag phosphors. The investigation comprised thermal de-excitation, analyses of the damping curves near and in the range of thermal extinction of luminescence were made; furthermore, the thermal decoloration and the spectra of excited absorption were studied. Concerning the ZnS-Cu phosphor it was possible to show that the light sums recorded in each of the

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S/048/61/025/004/013/048  
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Possibility of the...

three groups of electron localization levels change nonmonotonically with changes of temperature. The ratio  $\gamma = A_0/A_T$  as a function of temperature was shown to pass through a maximum.  $A_0$  is the trapping probability,  $A_T$  the recombination probability.  $\gamma = \gamma(T)$  rises up to extinction, whereupon it drops to zero. The behavior of  $\gamma$  can be explained by considering the necessity of a thermal activation for the localization of electrons. Under these premises,  $\gamma$  can be represented by  $\gamma = A_0/(A_T^r + A_T^{rl}) = \gamma_0/(1 + Ce^{-\Omega/kT})$ . Here,  $A_T^r$  and  $A_T^{rl}$  denote the probabilities for radiative and radiationless recombinations,  $\Omega$  is the activation energy for a radiationless recombination,  $\gamma_0$  and  $C$  are constants. It is further assumed that

$A_0 = fe^{-\Delta/kT}$ ,  $\Delta$  being the activation energy for electron trapping at adhesion levels.  $\gamma$  is shown to pass through a maximum if  $\Delta < \Omega$ . The mechanism of the destruction of color centers by ions in alkali halide phosphors is discussed next: A punctiform microdefect is formed in a given lattice site. The probability for such microdefects to be liberated is  $P_v = P_{ov} \exp(-Q_v/kT)$ , where  $Q_v$  denotes the activation energy. These punctiform microdefects interact with the F centers and destroy them, or

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S/048/61/025/004/013/048

B104/B201

Possibility of the...

the microdefects interact with the dislocations and are "trapped" by them. Approximation equation

$$-dn_F/dt = P_{oy} \frac{n_v}{\gamma_o N} n_F \exp(-(Q_p + Q_v - Q_c)/kT)$$

is obtained, where  $n_F$  denotes the number of F centers,  $n$  the number of sites at which the formation of free microdefects is possible,  $Q_p$  is the activation energy for the trapping of a microdefect by an F center, and  $Q_c$  the activation energy for the trapping by a dislocation. The factor in this equation depends upon the production conditions, and may take unusual high values exceeding the oscillation frequency of the ions. In the ensuing discussion, Ch. B. Lushchik made a brief report of results obtained at Tartu, and stated that values observed for the abovementioned factor amounted to as much as  $10^{22} \text{ sec}^{-1}$ . Adirovich, F. I. Vergunas, and F. N. Zaitoy are mentioned. There are 1 figure and 12 references: 11 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Ref. 4: Randall D. T., Wilkins, M. H. F., Proc. Roy. Soc. A., 184, 366 (1945).



Card 3/3

24.7560

39036

S/139/62/000/003/006/021  
E039/E420

AUTHORS: Zaitov, F.N., Lukantsever, Yu.L.

TITLE: On the thermal decoloration of F-colour centres for alkali halide crystals in the optical region

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Fizika, no.3, 1962, 45-48

TEXT: Results on the destruction of F-colour centres in single crystals of NaCl in the optical and thermal regions are compared. Crystals were excited in an X-ray beam for 30 minutes. Thermal decoloration was produced by heating from  $\sim 270$  to  $450^{\circ}\text{K}$  at a rate of  $0.15^{\circ}\text{K}/\text{sec}$ . Comparison of the curves obtained in the thermal and optical regimes show that at  $355^{\circ}\text{K}$  in the thermal regime 15% of all the F-centres are destroyed whereas in the optical regime about 95% are destroyed. Results are also given for the intermediate region between the optical and thermal regimes. By means of a preliminary heating, single stage thermal decoloration curves were obtained instead of the usual two stage ones. By the use of these curves the kinetics of the destruction of F-centres was investigated. The effect of the intensity of  
Card 1/2

39036  
S/139/62/000/003/006/021  
E039/E420

On the thermal decoloration ...

excitation light is discussed and compared with theory. The second stage in the thermal decoloration curve coincides with the corresponding position on the thermal decoloration of M-absorption bands and the luminescence peak corresponding to the destruction of M-centres in NaCl crystals. The effect of the presence of M-centres on the destruction of F-centres is discussed in detail. There are 2 figures.

ASSOCIATION: Oshskiy gospedinstitut Kirgizskoy SSR  
(Osh State Pedagogical Institute of the Kirgiz SSR)

SUBMITTED: March 10, 1961

Card 2/2

SIDLYARENKO, V.I.; ZAITOV, F.N.; LUKANTSEVER, Yu.L.

Existence of F-centers with different thermal stability in alkali  
halide phosphors. Opt.i spektr. 13 no.1:143-144 JI '62.  
(MIRA 15:7)

(Alkali metal halides--Thermal properties) (Phosphors)